	Application No.	Applicant(s)
Notice of Allowability	10/510,494	SHIGEMATSU, NORIO
	Examiner	Art Unit
		2627
	K. Wong	2021
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to		٠.
2. X The allowed claim(s) is/are 1-21.		
<ul> <li>3.</li></ul>		
Certified copies of the priority documents have been received.      Certified copies of the priority documents have been received in Application No		
3. ☑ Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
Attachment(s)		
1. Notice of References Cited (PTO-892)	5. Notice of Informal F	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	<ol> <li>Interview Summary Paper No./Mail Da</li> </ol>	te
3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 12/6/04	7. ☐ Examiner's Amendi	ment/Comment
4. Examiner's Comment Regarding Requirement for Deposit	8. Examiner's Stateme	ent of Reasons for Allowance
of Biological Material	9.  Other	
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## **DETAILED ACTION**

## Allowable Subject Matter

Claims (1-21) are allowed.

The following is an examiner's statement of reasons for allowance:

regarding claims 1, 5-13 and 15-20: the prior art of record (Dang et al {6947243}, Hirai {6768705} and Kusumoto {6894862}) in combinations or separately fails to discloses or suggests the disk drive eccentricity control that based on a phase learning means which the difference between a sawtooth wave and the sinusoidal wave with learned phase error, and, the weight factor calculation is based on the position error and the sinusoidal wave;

regarding claim 14 and 21: the prior art of record (Dang et al {6947243}, Hirai {6768705} and Kusumoto {6894862}) in combinations or separately fails to discloses or suggests the eccentricity control that based on the detection of an external impact, conversion of the impact detection into voltage, and stopping the weight factor calculation when the voltage is exceeding the predetermined value.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (571) 272-7566.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, H. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kw

31 Jan 07

K. WONG | PRIMARY EXAMINER